

A Bag with a strap**Rec'd PCT/PTO 02 DEC 2004**

The present invention relates to a bag of the kind defined in the preamble of Claim 1.

5 It is known (US-A-5577652) to provide a bag with a strap whose ends are fastened to the bottom portion of the bag, wherein the strap extends through a fitting provided on the upper portion of the bag and can be displaced through the strap fitting either to a position in which the strap forms two loops of mutually the same size (one for each shoulder of the bag user) so that the bag can be worn as a back pack with vertically orientated main
10 surfaces, or to an end position in which the strap forms a single large loop (between the strap fitting and one strap fastener) so that the bag can be carried over one shoulder of the user for instance.

15 In the case of this latter option, the centre of the bag will be located at a distance from the plane of the strap fitting so that the bag will tend to twist to a position in which the main bag surfaces deviate from said vertical orientation, therewith causing the bag to be uncomfortable to carry.

20 One object of the present invention is to provide a bag with which this drawback is eliminated either completely or partially.

A further object of the invention is to provide a bag with which the strap loops enable the bag to be carried comfortably in both of said instances.

25 These objects are achieved completely or partially by means of the present invention.

The invention is defined in the accompanying Claim 1.

30 Further embodiments of the invention will be apparent from the accompanying dependent Claims.

The present invention relates to a bag that includes four side wall portions that extend along respective edges of a bottom wall, and that further includes a front wall opposite to the bottom wall. In the case of preferred embodiments, the bottom wall is generally

rectangular and the bag is generally parallelepipedic in shape. The front wall of the bag will preferably have the form of a lid which is hinged along one of the side wall portions of the bag.

- 5 The bag includes a strap that has two ends which are fastened to a first side wall portion of the bag. The strap extends through a strap through-pass fitting.

According to one significant feature of the invention, the strap through-pass fitting is attached to a second side wall portion located opposite the first side-wall portion.

- 10 Moreover, the ends of the strap are connected to the first side wall portion by means of a device that can pivot in the plane of the first side wall portion and that is preferably located in respective end regions of said first side wall portion.

- 15 When the bag is adapted for use as a shoulder bag, the strap will thus lie flat and in abutment with three side wall portions and will extend centrally along said portions whereas the shoulder strap loop will extend at the fourth side wall portion. The strap and the strap loop will therewith extend generally in a plane that contains the central region /the centre of gravity of the bag, therewith enabling the bag to be carried comfortably over one shoulder of the user. When the bag shall be worn as a back-pack, the pivotal action of
20 the fittings at the ends of the strap enables the ends of the strap to be directed comfortably away from the plane of the bottom wall.

In preferred embodiments of the invention, the bottom wall of the bag is upholstered to provide comfortable contact with the user's back.

- 25 The third side wall portion suitably includes support feet on which the bag can be supported on the ground or some other underlying surface, wherewith the lid will be conveniently hinged to the third side wall portion. The support feet are located suitably in the vicinity of the bottom wall and the front wall respectively, so as to provide room for the
30 strap in contact with the outside of the third side wall portion when the bag is used as a shoulder bag.

The strap has a length adjustment fitting, which is located conveniently along the fourth side wall portion of the bag in a position that obviates the need for the length adjustment

fitting to pass through the strap through-pass fitting when changing between the two modes of use of the bag. The lid is suitably connected to the first, second and third side wall portions of the bag by zip fasteners.

- 5 The invention enables the bag to be readily adjusted between its two modes of use and a change in the effective length of the strap constitutes no problem with regard to the placement of the length adjustment fitting.

10 The invention will now be described by way of example with reference to the accompanying drawing, in which

Figure 1 is a schematic plan view of one main surface of a bag according to the present invention;

- 15 Figure 2 is a view taken on the line II – II in Fig. 1;

Figure 3 is a plan view of a second main surface of the bag according to Fig. 1, but with the strap displaced; and

- 20 Figure 4 is a view taken on the line IV – IV in Fig. 3.

Shown in Figs 1 and 3 is a generally octagonal parallelepipedic bag 1 that has a bottom wall 51 and a lid 61, which define the main surfaces of the bag. The bottom wall 51 is surrounded by a side wall 30 that includes four side-wall portions 11, 21, 31, 41 each
25 connecting to a respective edge of the bottom wall 51.

The bottom wall 51 is upholstered, so as to lie comfortably against the bag carrier.

- 30 The lid 61 is hinged to the side-wall portion 31 by hinge means 70 and connectable along its free edges to the side-wall 30 by means of zip fasteners 74. The ends of a strap 3 are connected to a first side-wall portion 11 by means of fittings 12 which are flat, sheet-like and disposed plane-parallel with the wall portion 11 in the vicinity of said portion, so as to be pivotal about a respective pivot shaft 13 that extends at right angles to the surface of the side-wall portion 11.

The strap 3 extends through a strap transit fitting 40 on a second side-wall portion 21 situated opposite the first side-wall portion 11. Figure 1 shows the strap 3 in a length-adjusted state in which it provides shoulder loops 45 between the strap transit 40 and respective end fittings 12, so that the bag can be carried on the user's back, as a back
5 pack, with one of the side-wall portions 11, 12 facing upside down. The pivotal action of the fitting 12 enables the strap ends connected thereto to take a correct angle relative to the plane of the bottom wall 51, essentially plane-parallel with the side-wall portion 11. When the bag is worn with a loop 45 around each shoulder, the difference in the pressure at which the strap edges abut the wearer of the bag can be reduced as a result of the pivotal
10 action of the fitting 12, wherewith the pressure of the strap edges against the wearer's shoulders will normally be very low when the side-wall portion 21 carrying the fitting 12 faces upwards.

As will be seen from Fig. 1, the side wall 30 includes a third side-wall portion 31 which is
15 provided with support feet 44, and that the strap 3 has a typical length adjustment fitting 4 in its length section located at a remaining fourth side-wall portion 41.

Figure 3 shows the bag of Figs 1 and 2 in a state in which the strap 3 is adjusted through the strap transit fitting 40 to an end position in which the strap 3 lies flat against and
20 stretched along the side-wall portions 31 and 21, wherein the strap 3 extends between the support feet 44 and centrally along the side wall 30 such as to form a strap loop 46 along the fourth side-wall portion 41. Fig. 3 shows the bag standing with its feet 44 on a flat underlying surface, with the strap held distanced therefrom.

25 Because the strap length adjustment fitting 4 is located in the proximity of the wall 11. i.e. the fitting 12, the length adjustment fitting will not interfere with the strap transit fitting 40 when the strap 3 shall be displaced to form two identical shoulder loops 45 (Fig. 1).

30 A change in the length of the strap 3 through the action of the length adjustment fitting 40 will not therefore have any detrimental repercussions when converting the bag between its two modes of use illustrated in Figs 1 and 3 respectively.

As a result of the present invention, when in the state shown in Fig. 1 the bag can be carried with its volumetric centre/centre of gravity essentially in the plane that is pitched

by the strap loop 46, thereby enabling the bag to be carried comfortably with the strap loop 46 over one shoulder of the bag user. The bag can also be readily switched between its two modes of use according to Figs 1 and 3. The bag may also be provided with appropriate means for restricting the extent to which the lid 61 can be opened away from the main part of the bag.